# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/786,319 | 02/25/2004 | Daniel Zuzuly | 2004P02541US (00355P0126U | 2648 |

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| 7590 12/20/2005 | | EXAMINER |
| Elsa Keller | | VO, HIEN XUAN |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2863 | |

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DATE MAILED: 12/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 10/786,319 | ZUZULY ET AL. |
| | Examiner | Art Unit | |
| | Hien X. Vo | 2863 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>26 September 2005</u>.

2a)☒ This action is **FINAL.**    2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-27</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) <u>1-27</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>02 July 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All  b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

## DETAILED ACTION

### *Double Patenting*

1.      The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2.      Claims 1-27 provisionally rejected under the judicially created doctrine of double patenting over claims 1-27 of copending Application No. 10/786,320. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

<u>Application Ser. No. 10/786,319</u>

<u>Copending Application Ser. No. 10/786,320</u>

| | |
|---|---|
| 1. A method of providing electrical system monitoring and diagnosis, comprising:<br>　　providing a motor controller including solid state switches for controlling application of power to the motor, and a control circuit for controlling operation of the solid state switches and for measuring electrical power system characteristics relating to operation of the solid state switches;<br>　　providing an external monitoring and diagnostic device;<br>　　establishing communications between the control circuit and the external monitoring and diagnostic device, and<br>　　periodically transferring parameters of the measured electrical power system characteristics from the control circuit to the external monitoring and diagnostic device to monitor electrical power system characteristics in real time. | 1. A method of configuring a motor controller with an external device, comprising:<br>　　providing the motor controller to include solid state switches for controlling application of power to the motor, and a control circuit for controlling operation of the solid state switches, the control circuit comprising a programmed processor for commanding operation of the solid state switches, and a memory connected to the programmed processor for storing parameters relating to operation of the solid state switches;<br>　　providing <u>the external device to include a memory for storing parameters relating to operation of the solid state switches,</u><br>　　establishing communications between the programmed processor and <u>the external device,</u> and<br>　　transferring <u>a configuration database file between the controller memory and the external device memory, the configuration database file comprising a plurality of the stored parameters</u> relating to operation of the solid state switches. |
| 2. The method of providing electrical system monitoring and diagnosis of claim 1 wherein providing a motor controller comprises providing a control circuit including a programmed processor for commanding operation of the solid state switches and a memory connected to the programmed processor for storing the parameters of the measured electrical power system characteristics. | |
| 3. The method of providing electrical system monitoring and diagnosis of claim 2 wherein transferring parameters of the measured electrical power system characteristics comprises reading the stored parameters of the measured electrical power system characteristics from the memory. | |
| 4. The method of providing electrical system monitoring and diagnosis device of claim 1 wherein providing an external monitoring and diagnostic device comprises providing a computer having a memory for storing the transferred parameters. | 2. The method of configuring a motor controller with an external device of claim 1 further comprising <u>entering parameters relating to operation of the solid state switches into the external device memory to define the configuration database file to be transferred to the controller memory.</u> |
| 5. The method of providing electrical system monitoring and diagnosis of claim 1 wherein providing an external monitoring and diagnostic device comprises providing a personal digital assistant having a memory for storing the transferred parameters. | 3. The method of configuring a motor controller with an external device of claim 1 wherein transferring a configuration database file comprises downloading the configuration database file from the external device memory to the controller memory. |
| 6. The method of providing electrical system monitoring and diagnosis of claim 1 further comprising printing a listing of the transferred parameters of the measured electrical power system characteristics. | 4. The method of configuring a motor controller with an external device of claim 1 wherein transferring a configuration database tile comprises uploading the configuration database file from the controller memory to the external device memory. |
| 7. The method of providing electrical system monitoring and diagnosis of claim 1 wherein periodically transferring parameters of the measured electrical power system characteristics comprises transferring the parameters at select time intervals. | 5. The method of configuring a motor controller with an external device of claim 4 further comprising subsequently downloading the uploaded configuration database file from the external device memory to the controller memory. |
| 8. The method of providing electrical system monitoring and diagnosis of claim 1 wherein the control circuit measures line voltage, motor voltage and motor current. | 6. The method of configuring a motor controller with an external device of claim 4 further comprising printing a listing of the uploaded configuration database file. |
| 9. The method of providing electrical system monitoring and diagnosis of claim 1 wherein establishing communications | 7. The method of configuring a motor controller with an external device of claim 1 further comprising storing a plurality of pre-configured database files in the external device memory. |

between the control circuit and the external monitoring and diagnostic device comprises providing an infrared communication path between the control circuit and the external monitoring and diagnostic device.

10. The method of providing electrical system monitoring and diagnosis of claim 1 wherein establishing communications between the control circuit and the external monitoring and diagnostic device comprises providing a wired communication path between the control circuit and the external monitoring and diagnostic device.

11. A motor controller system for monitoring and diagnosing electrical power system characteristics, comprising:
    a motor controller including solid state switches for controlling application of power to a motor, and a control circuit for controlling operation of the solid state switches and for measuring electrical power system characteristics relating to operation of the solid state switches;
    an external monitoring and diagnostic device including a memory for storing parameters of the measured electrical power system characteristics and an interface for communication with the motor controller; and
    means operatively associated with the control circuit and the external monitoring and diagnostic device for transferring parameters of the measured electrical power system characteristics from the control circuit to the external monitoring and diagnostic device to monitor electrical power system characteristics in real time.

12. The motor controller system of claim 11 wherein the control circuit comprises a programmed processor for commanding operation of the solid state switches and a memory connected to the programmed processor for storing the parameters of the measured electrical power system characteristics.

13. The motor controller system of claim 12 wherein the transferring means comprises means for reading the stored parameters of the measured electrical power system characteristics from the memory.

14. The motor controller system of claim 11 wherein the external monitoring and diagnostic device comprises a computer having a memory for storing the transferred parameters.

15. The motor controller system of claim 11 wherein the external monitoring and diagnostic device comprises a personal digital assistant having a memory for storing the transferred parameters.

16. The motor controller system of claim 11 further comprising printer operatively associated with the external monitoring and diagnostic device for printing a listing of the transferred parameters of the measured electrical power system characteristics.

17. The motor controller system of claim 11 wherein the transferring means transfers the parameters at select time intervals.

8. The method of configuring a motor controller with an external device of claim 7 wherein transferring a configuration database file comprises downloading a select one of the pre-configured database tiles from the external device memory to the controller memory.

9. The method of configuring a motor controller with an external device of claim 1 wherein establishing communications between the programmed processor and the external device comprises providing an infrared communication path between the programmed processor and the external device.

10. The method of configuring a motor controller with an external device of claim 1 wherein establishing communications between the programmed processor and the external device comprises providing a wired communication path between the programmed processor and the external device.

11. An externally configurable motor controller system, comprising:
    a motor controller including solid state switches for controlling application of power to a motor, and a control circuit for controlling operation of the solid state switches, the control circuit comprising a programmed processor for commanding operation of the solid state switches, and a memory connected to the programmed processor storing parameters relating to operation of the solid state switches,' and an interface circuit operatively connected to the programmed processor,
    an external configuration device including a memory for storing parameters relating to operation of the solid state switches and an interface for communication with the motor controller; and
    means operatively associated with the programmed processor and the external configuration device for transferring a configuration database file between the controller memory and the external device memory, the configuration database file comprising a plurality of the stored parameters relating to operation of the solid state switches.

12. The externally configurable motor controller system of claim 11 wherein the parameters stored in the external device memory define the configuration database file to be transferred to the controller memory.

13. The externally configurable motor controller system of claim 11 wherein the transferring means comprises means for downloading the configuration database file from the external device memory to the controller memory.

14. The externally configurable motor controller system of claim 11 wherein the transferring means comprises means for uploading the configuration database tile from the controller memory to the external device memory

15. The externally configurable motor controller system of claim 14 wherein the transferring means further comprises means for subsequently downloading the uploaded configuration database file from the external device memory to the controller memory.

16. The externally configurable motor controller system of claim 14 further comprising a printer operatively associated

with the external device for printing a listing of the uploaded configuration database file.

17.    The externally configurable motor controller system of claim 11 wherein the external device memory stores a plurality of pre-configured database files.

18. The externally configurable motor controller system of claim 17 wherein the transferring means comprises downloading a select one of the pre-configured database files from the external device memory to the controller memory.

18. The motor controller system of claim 11 wherein the control circuit measures line voltage, motor voltage and motor current.

19.    The motor controller system of claim 11 wherein the transferring means comprises an infrared communication path between the control circuit and the external monitoring and diagnostic device.

19.    The externally configurable motor controller system of claim 11 further comprising an infrared communication path between the programmed processor and the external device.

20.    The motor controller system of claim 11 wherein the transferring means comprises a wired communication path between the control circuit and the external monitoring and diagnostic device.

20.    The externally configurable motor controller system of claim 11 further comprising a wired communication path between the programmed processor and the external device.

21.    A soft starter system for monitoring and diagnosing electrical power system characteristics, comprising:
    a motor controller including solid state switches for controlling application of power to a motor, and a control circuit for controlling operation of the solid state switches, the control circuit comprising a programmed processor for commanding operation of the solid state switches and for measuring electrical power system characteristics relating to operation of the solid state switches, and a memory connected to the programmed processor storing parameters of the measured electrical power system characteristics;
    an external monitoring and diagnostic device including a memory for storing parameters of the measured electrical power system characteristics and an interface for communication with the motor controller, and
    a monitoring and diagnostic program operatively implemented in the external monitoring and diagnostic device for transferring parameters of the measured electrical power system characteristics from the control circuit to the external monitoring and diagnostic device to monitor electrical power system characteristics in real time.

21.    An externally configurable soft starter system, comprising:
    a motor controller including solid state switches for controlling application of power to a motor, and a control circuit for controlling operation of the solid state switches, the control circuit comprising a programmed processor for commanding operation of the solid state switches, and a memory connected to the programmed processor storing parameters relating to operation of the solid state switches, and an interface circuit operatively connected to the programmed processor;
    an external configuration device including a memory for storing parameters relating to operation of the solid state switches and an interface for communication with the motor controller, and
    a configuration program operatively implemented in the programmed processor and the external configuration device for transferring a configuration database file between the controller memory and the external device memory, the configuration database file comprising a plurality of the stored parameters relating to operation of the solid state switches.

22. The soft starter system of claim 21 wherein the external monitoring and diagnostic device comprises a computer having a memory for storing the transferred parameters.

22.    The externally configurable soft starter system of claim 21 wherein the parameters stored in the external device memory define the configuration database file to be transferred to the controller memory.

23.    The soft starter system of claim 21 wherein the external monitoring and diagnostic device comprises a personal digital assistant having a memory for storing the transferred parameters.

23.    The externally configurable soft starter system of claim 21 wherein the configuration program is operable to download the configuration database tile from the external device memory to the controller memory.

24.    The soft starter system of claim 21 wherein the monitoring and diagnostic program is operable to upload the parameters from the controller memory to the external monitoring and diagnostic device memory.

24. The externally configurable soft starter system of claim 21 wherein the configuration program is operable to upload the configuration database file from the controller memory to the external device memory.

25. The soft starter system of claim 21 wherein the control circuit measures line voltage, motor voltage and motor current.

25. The externally configurable soft starter system of claim 24 wherein the configuration program is operable to subsequently download the uploaded configuration database file from the external device memory to the controller memory.

| 26. The soft starter system of claim 21 wherein the interface comprises a wireless interface. | 26.   The externally configurable soft starter system of claim 21 wherein the external device memory stores a plurality of pre-configured database files. |
| 27. The soft starter system of claim 26 wherein the interface comprises a wired interface. | 27.   The externally configurable soft starter system of claim 26 wherein the configuration program is operable to download a select one of the pre-configured database files from the external device memory to the controller memory. |

Although the conflicting claims are not identical, they are not patentably distinct from each other because the independent claims of the present application differ from the patented claims in having the phrase: "an external monitoring and diagnostic device" and "database file" or the equivalent language. In order to monitor and diagnosis of the motor controller including solid state switches for controlling application of power to the motor, and a control circuit for controlling operation of the solid state switches and for measuring electrical power system characteristics relating to operation of the solid state switches with the external device that includes a programmed processor and memory to store the parameters relating to operation of the solid states switches and downloading or uploading to the motor controller by the communication path such as infrared, wired or wireless. Therefore, the subject claims are broader than the copending application claims. It would therefore have been obvious to modify the claims of copending application 10/786,320 to claim the more limited of the external monitoring and diagnosis device.

3.     Applicant's arguments filed 09/26/05 have been fully considered but they are not persuasive. The recitation of the present invention providing a motor controller which measures electrical power system characteristics including a solid state switches, control circuit, external device, transfer parameters of the measured electrical power

system. The '320 application specities providing a motor controller including a control circuit comprising a programmed processor for commanding operation of solid state switches and a memory connected to the program processor for storing parameters relating to operation of the solid state switches has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Therefore, the features of Copending Application Ser. No. 10/786,320 still read on the certain features of applicant's invention.

4.      **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.
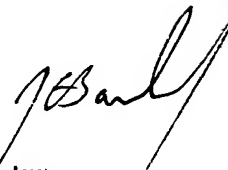
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien X. Vo whose telephone number is (571) 272-2282. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hien Vo
12/14/05

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